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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHANG, VICTOR S

ART UNIT PAPER NUMBER

1771

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,779

Applicant(s)

SKRZYNIARZ ET AL.

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-18,21 and 22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 12-18,21 and 22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. Applicants' response filed on 8/28/2006 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejections Based on Prior Art

3. Claims 12-14 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karszes (US 3891788).

Karszes' invention relates to adhesives for forming laminates [col. 1, lines 4-12].

Karszes teaches that it is known art that white glue (emulsion adhesive) polyvinyl acetate is a suitable adhesive for bonding high pressure laminates to a substrate such as plywood, particle board, chipboard, etc., to make countertop, flooring, etc. [col. 2, lines 15-27].

For claim 12, regarding the product-by-process limitation "the wood composite is bonded to the high pressure laminate using a foamed adhesive", since the method limitation has not been shown on the record to produce a structurally or chemically distinct article, the formed articles are rendered *prima facie* obvious. See MPEP § 2113.

Similarly, for claim 13, regarding the product-by-process limitation "the foamed adhesive is foamed from about 20 to about 60% by volume", since the method limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious.

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For claim 14, since Karszes' white glue polyvinyl acetate is inherently a blend of a plurality of molecules of polyvinyl acetate, it reads on the recited limitation "a blend of at least two polyvinyl acetates" as claimed. Alternatively, the Examiner contends that, in the absence of any structural and/or chemical property differences between the "two polyvinyl acetates", the recited limitation does not preclude a single polyvinyl acetate homopolymer to read on the instant invention as claimed; for example, the initial and final portions of polyvinyl acetate emulsion measured for use also reads on the term "two polyvinyl acetates" as claimed.

For claim 21, with respect to the product-by-process limitations of preparing polyvinyl acetate by "batch polymerization" and "continuous polymerization", since the polymerization processes have not been shown to produce materially different polyvinyl acetates, the formed articles are rendered *prima facie* obvious.

4. Claims 12-17, 21 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mafoti et al. (US 5804618).

Mafoti's invention relates to polyvinyl acetate emulsion based adhesives for bonding melamine formaldehyde resin treated decorative solid color and print paper to particle board. This polyvinyl acetate emulsion based adhesive is formulated with tackified polyvinyl alcohol, starch, a tackifier and a coupling agent. Wrinkling and edge and corner peel resulting during the movement of sheets of melamine resin treated paper on the top and bottom surfaces of sheets of particle board is substantially eliminated [abstract]. More particularly, Mafoti teaches that the melamine formaldehyde resin treated decorative solid color and print paper is a high pressure decorative laminate of melamine formaldehyde impregnated paper, and it can be adhesively bonded to particle board [col. 1, line 66 through col. 2, line 12].

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For claim 12, regarding the product-by-process limitation “the wood composite is bonded to the high pressure laminate using a foamed adhesive”, since the method limitation has not been shown on the record to produce a structurally or chemically distinct article, the formed articles are rendered *prima facie* obvious. See MPEP § 2113.

Similarly, for claim 13, regarding the product-by-process limitation “the foamed adhesive is foamed from about 20 to about 60% by volume”, since the method limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious.

For claim 14, since Mafoti’s polyvinyl acetate emulsion based adhesive is inherently a blend of a plurality of molecules of polyvinyl acetate, it reads on the recited limitation “a blend of at least two polyvinyl acetates” as claimed. Alternatively, the Examiner contends that, in the absence of any structural and/or chemical property differences between the “two polyvinyl acetates”, the recited limitation does not preclude a single polyvinyl acetate homopolymer to read on the instant invention as claimed; for example, the initial and final portions of polyvinyl acetate emulsion measured for use also reads on the term “two polyvinyl acetates” as claimed.

For claims 15 and 16, Mafoti teaches the inclusion of a starch filler in polyvinyl acetate emulsion adhesive, as set forth above.

For claim 17, Mafoti teaches the inclusion of a defoamer in the polyvinyl acetate emulsion based adhesive formulation [col. 5, line 5].

For claim 21, with respect to the product-by-process limitations of preparing polyvinyl acetate by “batch polymerization” and “continuous polymerization”, since the polymerization

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processes have not been shown to produce materially different polyvinyl acetates, the formed articles are rendered *prima facie* obvious.

For claim 22, Mafoti teaches that the suitable amounts of vinyl acetate homopolymer emulsion and starch are in the ranges of 69-88 and 5-24 wt%, respectively [col. 8, lines 50-57].

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karszes (US 3891788) in view of Mafoti et al. (US 5804618).

The teachings of Karszes and Mafoti and Murphy are again relied upon as set forth above.

For claim 18, in the absence of unexpected results it would have been obvious to one of ordinary skill in the art to modify and formulate the polyvinyl acetate adhesive of Karszes with a suitable starch filler, as taught by Mafoti, motivated by the desire to obtain an improved countertop in which wrinkling, and peeling at edge and corner are substantially eliminated.

Response to Argument

6. Applicants argue [Remarks, page 4, last paragraph] that a product prepared using a foamed adhesive unexpectedly results in a product that has the same strength, yet requires less adhesive. However, Applicants have not provided any factual support for the alleged unexpected results. Applicants' argument is unpersuasive.

Applicants argue [Remarks, page 4, last paragraph] that the cited art neither discloses nor suggests that an adhesive may be foamed, and a product prepared using an amount of wet adhesive is clearly different than a product prepared using 20% to 60% less adhesive, e.g., using an adhesive foamed from 20 to 60% by volume, because the product is different when it is newly

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made, and the final dry product will contain less adhesive and will show the presence of air voids throughout. However, applicants are reminded that 1) since the method limitation has not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious; 2) the amount of adhesive is absent from the claims. Even if the amount of adhesive is claimed, since the same end product is formed, a suitable amount of adhesive in the final product is reasonably considered to be an obvious matter of optimization, motivated by the desire to obtain desired adhesion strength economically; 3) applicants have failed to provide any evidence that the final dry product contain less adhesive and will show the presence of air voids throughout, and yet have the same strength. Applicants' unsupported argument appears to analyze the final product in a vacuum, and there is no reason for one skilled in the art to believe that a voided structure would have equal mechanical strength as a solid article. Applicants' argument is unpersuasive.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VS

Victor S Chang
Examiner
Art Unit 1771

9/21/2006



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